

**Amendments to the Drawings:**

The attached sheets of drawings include changes to Figs. 1-4. These sheets, which include Figs. 1-4, replace the original sheets including Fig. 1-4. In Figs. 1-4, Chinese characters have been replaced with English wording.

Attachment: Replacement Sheet, and  
Annotated Sheet Showing Changes.

### **REMARKS**

Claims 1-10 were pending in the present application before the amendment as set forth above. By this Amendment, claims 1-8 and 10 are amended, and claim 9 is canceled.

The May 24, 2007 Office Action rejected claims 1-10 under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 3,183,080 (hereinafter "US '080"), Japanese Pat. No. 8-209308 (hereinafter "JP '308"), Japanese Pat. No. 52-127424 (hereinafter "JP '424"), or Japanese Pat. No. 10-130786 (hereinafter "JP '786"). Claims 1-6, 9 and 10 were also objected to because of informalities. Furthermore, claims 6 and 9 were objected to under 37 C.F.R. §1.75 as being a substantial duplicate of claims 1 and 7, respectively.

Additionally, the disclosure was objected to because of informalities. The drawings were objected to because the Chinese characters need to be replace with English wording.

Applicant appreciates the Primary Examiner's careful review of the application.

In response, as set forth above, claims 1-8 and 10 have been amended to correct typos and informalities, according to the Primary Examiner's suggestions. Accordingly, applicant respectively submits that the objections to claims 1-6 and 10 have been overcome.

Additionally, without acquiescing in the propriety of the Examiner's rejections and to facilitate the prosecution of the current application, claim 9 has been canceled, which makes the Primary Examiner's rejection under 35 U.S.C. §103 and objection under 37 C.F.R. §1.75 to claim 9 moot.

Moreover, the specification and drawings have been amended for a better form so that the amended claims, the written description, abstract and the drawings are consistent with each other. Specifically, according to the Primary Examiner's suggestion, the term "0Cr18Ni9" has been replaced with "Cr18Ni9" in the specification of paragraph from page 1, lines 11-24, and Chinese characters have been replaced with English wording in the drawings of Figs. 1-4, respectively. Accordingly, the objections to the disclosure and the drawings have been overcome.

Applicants assert that no new matter is added.

The following remarks herein are considered to be responsive thereto.

### **35 U.S.C. §103 Rejections**

The May 24, 2007 Office Action rejected claims 1-10 under 35 U.S.C. §103(a) as being

unpatentable over US '080, JP '308, JP '424, or JP '786. Applicants respectfully traverse the rejection made by the Examiner at least for the reasons set forth below:

**Claims 1-6:**

As set forth above, among other unique limitations, amended claim 1 recites "use of an alloy to make kitchen utensils, wherein the alloy has a composition (in wt%) ***consisting of***: Cr 16-19, C  $\leq 0.025$ , Si  $\leq 1.00$ , Mn  $\leq 1.00$ , N  $\leq 0.02$ , Ni  $\leq 0.60$ , Ti  $\leq 0.75$ , Mo 0.75-1.50 and the balance of Fe." (Emphasis added.)

According to MPEP §2111.03, the use of the transitional phrase "***consisting of***" ***excludes any element, step, or ingredient not specified in the claim.*** That is, the alloy recited in amended claim 1 having a composition ***containing only elements of Cr, C, Si, Mn, N, Ni, Ti, Mo and Fe,*** where Cr 16-19, C  $\leq 0.025$ , Si  $\leq 1.00$ , Mn  $\leq 1.00$ , N  $\leq 0.02$ , Ni  $\leq 0.60$ , Ti  $\leq 0.75$ , Mo 0.75-1.50 and the balance of Fe, in wt%.

In contrast, as understood by applicant, US '080 discloses a first steel (in wt%) consisting of Cr 14-25, C  $\leq 0.3$ , Mn  $\leq 1.25$ , Si  $\leq 1$ , Cb 0.001-1, Mo 0.25-1.25, Cu 0.25-1.25, and balance of Fe, and a second steel (in wt%) consisting of Cr 14-19, C  $\leq 0.15$ , Mn  $\leq 1$ , Si  $\leq 1$ , P  $\leq 0.04$ , S  $\leq 0.03$ , Cb 0.1-0.7, Mo 0.4-1.1, Cu 0.4-1.1, and balance of Fe, where (Mo+Cb+Cu)  $\geq 1.25$ . (US '080, col. 5, lines 23-32 through col. 6, lines 1-19.) That is, ***US '080 requires additional elements, such as Cu, Cb, P, and S,*** which are lacking from the composition as recited in amended claim 1.

JP '424 recites a steel (in wt%) consisting of C 0.001-0.1, Si 0.05-1, Mn 0.1-2, Cr 15-20, S 0.001-0.02, Ce 0.01-1, Ti 0.01-1, Nb 0.01-1, Mo 0.01-5, B 0.001-0.05, and balance of Fe. (JP '424, Abstract.) That is, ***JP '424 requires additional elements, such as Ce, Nb, B, and S,*** which are lacking from the composition as recited in amended claim 1.

JP '786 discloses a composition (in wt%) consisting of C  $\leq 0.02$ , Si  $\leq 1$ , Mn  $\leq 1$ , P  $\leq 0.08$ , S  $\leq 0.01$ , Al  $\leq 0.3$ , Cr 11-35, M 0.5-4, W  $\leq 0.003$ , Nb 0.003-0.008, B  $\leq 0.001$ , V 0.05-0.3, and balance of Fe. (JP '786, Abstract.) That is, ***JP '786 requires additional elements, such as P, S, B, Nb, M, V, W, and Al,*** which are lacking from the composition as recited in amended claim 1.

JP '308 discloses an alloy having a composition (in wt%) consisting of Cr 10-35, Al 2.5-10, and balance of Fe, and if necessary,  $\leq 1$  of one or more elements among Ti, Nb, Zr, V, W, Ta, Hf, and REM, further  $\leq 0$  of one or more elements among Ni, Mo, Cu, and Co, and in which the contents of C, N, Mn and S as impurities are regulated to  $\leq 0.05$ , 0.05, 2, and 0.01, respectively.

(JP '308, Abstract.) That is, *JP '308 requires additional elements, such as Cu, Co, Nb, Zr, V, W, Ta, Hf, B, S, REM and Al*, which are lacking from the composition as recited in amended claim 1.

In other words, the composition recited in amended claim 1 is non-obvious over US '080, JP '308, JP '424 and JP '786, taken alone or in combination, because it requires elements less than those disclosed in US '080, JP '308, JP '424 and JP '786, and has numerous advantages over the cited references including using a smaller number of metal elements, which reduces the cost of production and is more environment friendly.

Therefore, none of US '080, JP '308, JP '424 and JP '786, taken alone or in combination, suggests or teaches use of an alloy to make kitchen utensils, where the alloy has a composition (in wt%) *specifically consisting of* "Cr 16-19, C  $\leq$  0.025, Si  $\leq$  1.00, Mn  $\leq$  1.00, N  $\leq$  0.02, Ni  $\leq$  0.60, Ti  $\leq$  0.75, Mo 0.75-1.50 and the balance of Fe," according to amended claim 1 of the present invention.

For at least the foregoing reasons, independent claim 1, as amended, is patentable under 35 U.S.C. §103(a) over the cited references.

Accordingly, amended claims 2-6, which depend from now allowable amended claim 1, are patentable at least for this reason.

#### **Claims 7 and 8:**

Amended claim 7, among other unique limitations, recites "a kitchen utensil usable for an induction cooker or kitchenware that requires high heat conductivity and magnetoconductivity, being made of an alloy has a composition (in wt%) consisting of: Cr 16-19, C  $\leq$  0.025, Si  $\leq$  1.00, Mn  $\leq$  1.00, N  $\leq$  0.02, Ni  $\leq$  0.60, Ti  $\leq$  0.75, Mo 0.75-1.50 and the balance of Fe."

Referring to and incorporating herein the reasons set forth above with respect to why amended claim 1 is now allowable, applicant respectfully submits that amended claim 7 is patentable under 35 U.S.C. §103(a) over the cited references as well.

Accordingly, claims 8, which depends from now allowable amended claim 7, is patentable at least for this reason.

#### **Claims 10:**

As set forth above, among other unique limitations, amended claim 1 recites "use of an alloy to make kitchen utensils that require high heat conductivity and magnetoconductivity, wherein the alloy is in accordance with SUS436L."

Applicant respectfully submits that none of US '080, JP '308, JP '424 and JP '786, taken alone or in combination, suggests or teaches the use of an alloy in accordance with SUS436L to make kitchen utensils that require high heat conductivity and magnetoconductivity, as claimed in amended claim 10 of the present invention.

Therefore, amended claim 10 is patentable under 35 U.S.C. §103(a) over the cited references.

Any amendments to the claims not specifically referred to herein as being included for the purpose of distinguishing the claims from cited references are included for the purpose of clarification, consistence and/or grammatical correction only.

It is now believed that the application is in condition for allowance at least for the reasons set forth above and such allowance is respectfully requested.

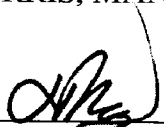
### **CONCLUSION**

Applicants respectfully submit that the foregoing Amendment and Response place this application in condition for allowance. If the Examiner believes that there are any issues that can be resolved by a telephone conference, or that there are any informalities that can be corrected by an Examiner's amendment, please call the undersigned at 404.495.3678.

Respectfully submitted,

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